



# Superfund At Work

## Hazardous Waste Cleanup Efforts

### Summit National Site Profile

**Site Description:** Former liquid waste disposal facility

**Site Size:** 11.5 acres

**Primary Contaminants:** Volatile organic compounds, organics, heavy metals, and polychlorinated biphenyls

**Potential Range of Health Effects:** Fire and explosion hazard; increased risk of cancer

**Year Listed on NPL:** 1983

**Ecological Concerns:** Contaminated ground water

**EPA Region:** 5

**State:** Ohio

**Congressional District:** 11

### Success in Brief

## Cooperative Settlements Hasten Ohio Cleanup

More than a few individuals are responsible for generating a hazardous waste site: the land owner, the operator of the facility, transporters of the wastes, government agencies, businesses, and various manufacturers, chemical companies, and producers of commodities in trade. Some of these "responsible parties" contribute or transport very small amounts of waste compared to the total volume. Small waste contributors, known as *de minimis* parties, are eligible to participate in settlements that do not require actual performance of construction or remedial work. *De minimis* parties resolve their liability by making a cash payment towards the selected remedy.

Such settlements typically include a "covenant not to sue", a promise that EPA will bring no further legal action against the party at the site. "Contribution protection" is also included which ensures that major waste contributors cannot sue to recover additional cleanup costs.

At the Summit National Superfund site, a solvent recycling and disposal facility, 87% of the waste contributors signed *de minimis* settlements. The State of Ohio was an active partner in pursuing closure and

selecting a remedy that included excavation and incineration of soil and drums. Effective communication with local residents ensured public participation in the decisions reached at the site.

## The Site Today

The landfill has been capped since August, 1995 and seeded for grass. The buried drums and the mobile incinerator are long gone. The tops of monitoring and extraction wells remain visible, and the ground water treatment plant will hum quietly until standards are met.



**Acres of drums and bulk storage tanks** alarmed Deerfield citizens and forced the site closure by state officials.

## A Site Snapshot

The 11.5-acre Summit National site is located on an abandoned coal strip mine in the rural community of Deerfield, Ohio, about 45 miles southeast of Cleveland. Several homes, two other landfills, light industries, and farmland surround the site. The Berlin Lake Reservoir is one mile to the southeast.

From 1973 to 1978, the owner and operator accepted liquid wastes for storage, incineration, or burial at the site.



**Summit National  
Deerfield, OH**

The Ohio EPA determined that the soil, surface water, and ground water had been contaminated with volatile organic compounds, phenols, heavy

metals, polycyclic aromatic hydrocarbons, and polychlorinated biphenyls.

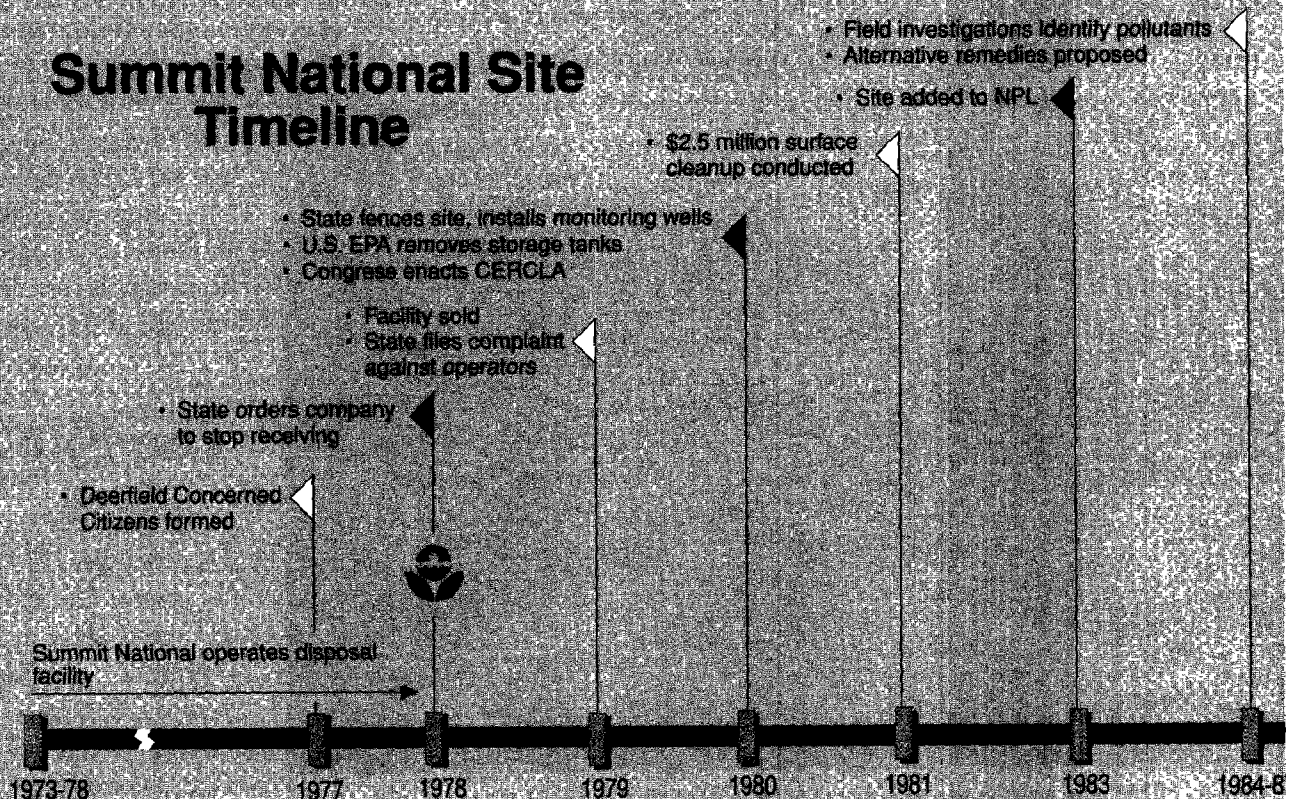
Most of these hazardous substances are suspected carcinogens that also cause a variety of central nervous system disorders.

In 1973, Summit National, Inc. began operating a solvent recycling and disposal facility. Liquid wastes including oil, resins, pesticides, spent solvents, and paint and metal plating sludges were accepted for storage or incineration. Workers stored various combinations of wastes together, creating a fire and explosion hazard.

### Concerned citizens spotlight hazardous conditions

Area residents had noticed the volume of drums accumulating on the site and contacted city officials about noxious fumes. A local group, Deerfield Concerned Citizens, formed in 1977 to draw attention to the site. Group members helped present environmental concerns to government agencies and testified at hearings in Colum-

## Summit National Site Timeline



## Cleanup

bus, Ohio. In June 1978, the state ordered the company to stop receiving wastes and to remove all liquid wastes stored at the site. The owners sold the site in March 1979. Later that year, the state filed a complaint against the site operators for violations of hazardous waste regulations.

Soil and surface water sampling confirmed the presence of contaminants. The state constructed a fence around the site and installed a surface water drainage system as well as six ground water monitoring wells. Later in 1980, using Clean Water Act authority, EPA removed three filled liquid storage tanks and some contaminated soil from the site. That December, Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act

(CERCLA), also known as "Superfund." This law directed EPA to start identifying and cleaning up thousands of abandoned or uncontrolled hazardous waste sites nationwide.

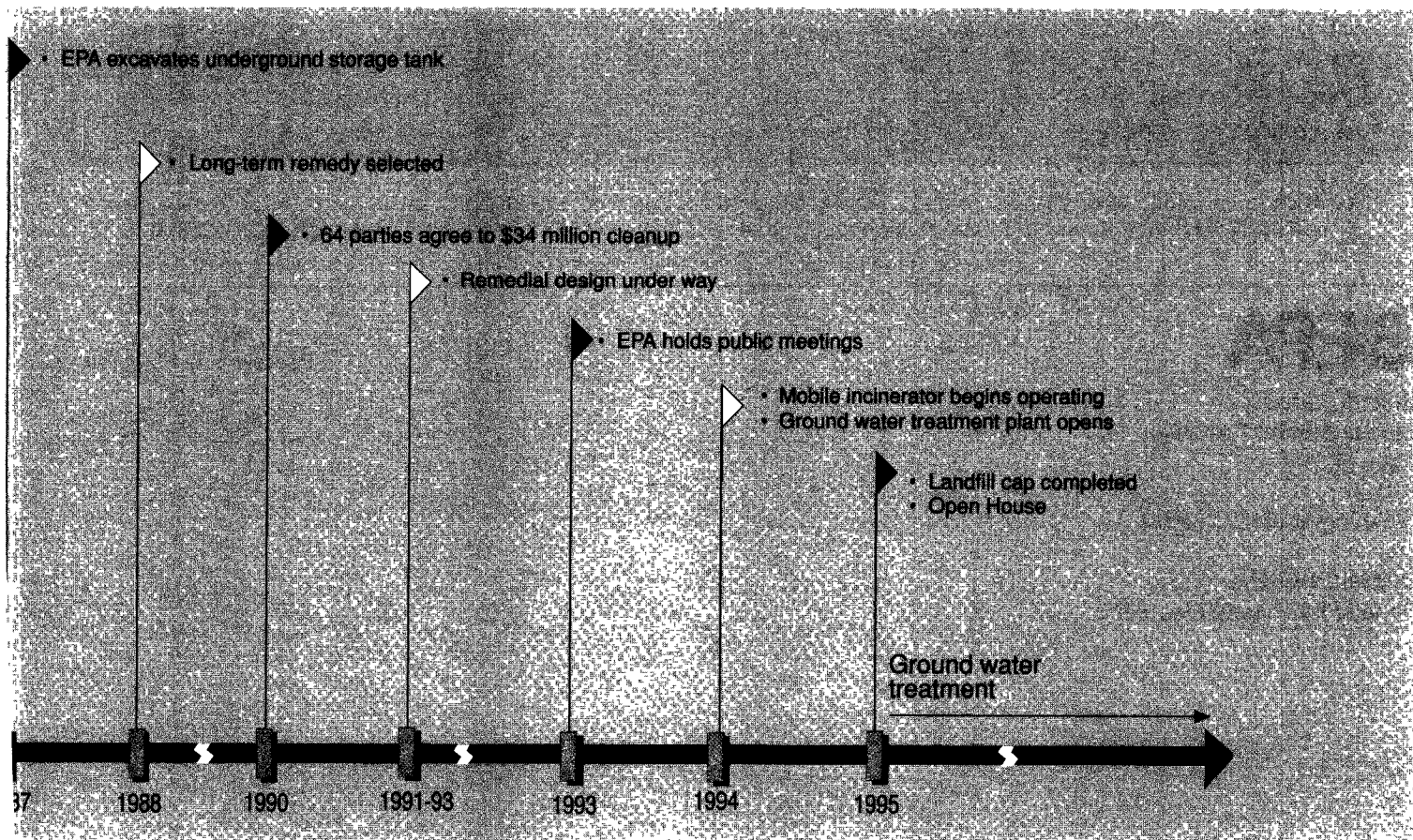
In 1981, the state reached an agreement with eight of the parties responsible for the contamination. A \$2.5 million surface cleanup removed drums, tanks, surface debris, and more soil. EPA then added the site in 1983 to the National Priorities List (NPL), a roster of sites eligible for comprehensive cleanup. Between 1984 and 1987, EPA and the state conducted field investigations to determine the nature and extent of contamination and evaluated alternative remedies. EPA also excavated an underground storage tank because of concern over

further contaminant migration into ground water.

### Effective enforcement leads to settlement

A recommended remedial plan was proposed in February, 1988 and presented at a public meeting. EPA and the state then began negotiations with the waste contributors to pay for and conduct the work. Of 73 parties identified, 64 entered into a consent decree in 1990. Many of the parties had contributed only small amounts of waste to the site. These *de minimis* parties "cashed out" and were released from further liability. Their funds were then available for the cleanup through a trust fund established for the remedial work.

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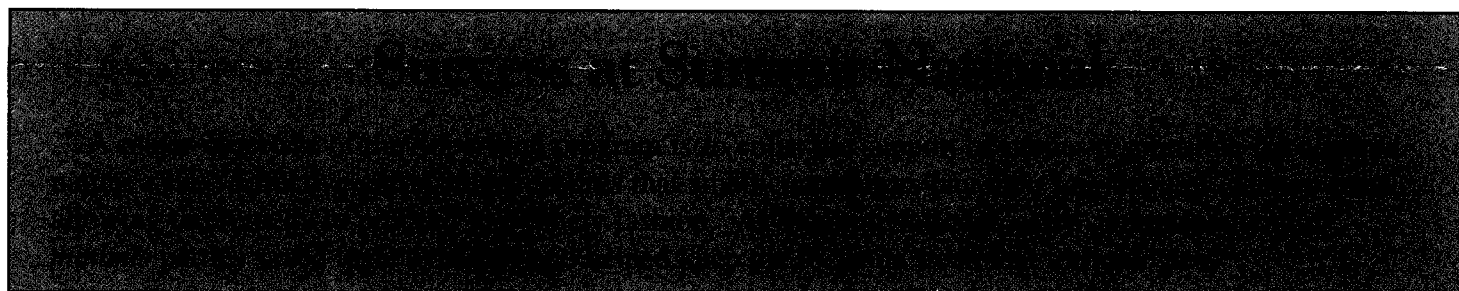
The remaining parties agreed to excavate and incinerate contaminated soil and drums, and demolish site buildings. Designing the remedy took about two years and was estimated at \$34.4 million. In 1993, EPA held a public meeting to address community concerns. Some citizens were worried about the temporary incinerator's emissions and their own lack of information about the technology. Working with community members, EPA opened five information repositories for convenient access to site documents and held two more public meetings to focus on the issue.

Over the next two years, the mobile incinerator treated 21,000 tons of contaminated soil. Excavated drums were shipped off site to an approved hazardous waste facility. Following incineration of wastes, EPA tested the ash for hazardous residues; the ash was used as on-site fill and the site regraded to its original contours. Approximately 16,000 cubic yards of fill and topsoil were transported to the site to form the landfill cap, which covers 10 acres of the site. Gas vents were installed to monitor and treat air emissions.

In 1994, construction of the on-site ground water treatment plant was completed. Two ground water

extraction systems were employed for treatment of water from the various levels of the on-site ground water table. In addition, surface water from ponds and drainage ditches was collected and treated, and pond sediments were dredged.

The ground water treatment plant and the tops of monitoring or extraction wells are the only visible structures remaining. The Summit National Facility Trust operates the water treatment plant and maintains the cap and fence. Access and deed restrictions control any future uses of the site.



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